

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: RASMUSSEN
SERIAL NO: 10/538,224 - PCT/EP03/15001
FILED: 06/09/2005
FOR: LAMINATES OF FILMS HAVING
IMPROVED RESISTANCE TO BENDING IN
ALL DIRECTIONS AND METHODS AND
APPARATUS FOR THEIR MANUFACTURE

§ **GROUP ART UNIT:**
§ **EXAMINER:**
§ **DOCKET: 50000/OR03**
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(571) 273-0459 FACSIMILE NO	CERTIFICATE OF MAIL BY FACSIMILE TRANSMISSION	<u>30 April 2007</u> Date of Deposit
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MS PCT LEGAL DEPARTMENT (571) 273-0459		
<u>30 April 2007</u> Date of Signature		

PETITION TO ACCEPT LOST DOCUMENTATION

On November 7, 2005, Applicant's attorney filed a Petition to Revive, A Statement of Unintentional Abandonment, Second Preliminary Amendment, a check for fees and a post card. Applicant's attorney received the post card in due course, which did not indicate that any of the documentation identified on the post card had not been received. Applicant's attorney also received the canceled check in due course.

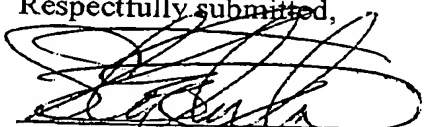
Applicant's attorney attaches a copy of all of the documentation submitted to the PCT on November 7, 2005 along with a copy of the return receipt postcard attached to the Express mail label and a copy of the canceled check.

Based on this information, Applicant's attorney respectfully requests reinstatement of this application from its current abandoned status to a pending status and that the application be processed out of the PCT into the Examination queue as a fully nationalized PCT application.

Thank you very much for your cooperation in this matter.

Date: 30 April 2007

Respectfully submitted,


Robert W. Strozier, Reg. No. 34,024
Attorney for Applicants

**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED
UNINTENTIONALLY UNDER 37 CFR 1.137(b)**Docket Number (Optional)
50000-OR03

First named inventor: Ole-Bendt Rasmussen

Internation (PCT) Application No.: PCT/EP03/15001

U.S. Application No.: 10/538,224
(if known)

Filed: 12 September 2003

Title: **LAMINATES OF FILMS HAVING IMPROVED RESISTANCE TO BENDING IN ALL DIRECTIONS
AND METHODS AND APPARATUS FOR THEIR MANUFACTURE**Attention: PCT Legal Staff
Mail Stop PCT
Commissioner for Patent
P.O. Box 1450
Alexandria, VA 22313-1450

EV434862221US

The above-identified application became abandoned as to the United States because the fees and documents required by 35 U.S.C. 371(c) were not filed prior to the expiration of the time set in 37 CFR 1.494(b) or (c) or 1.495(b) or (c) as applicable. The date of abandonment is the day after the date on which the 35 U.S.C. 371(c) requirements were due. See 37 CFR 1.494(g) to 1.495(h).

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION

NOTE: A grantable petition requires the following items:

- (1) Petition fee
- (2) Proper reply
- (3) Terminal disclaimer with disclaimer fee which is required for all international applications having an international filing date before June 8, 1995; and
- (4) Statement that the entire delay was unintentional.

1. Petition fee☒ Small entity-fee **\$750** (37 CFR 1.17(m)). Applicant claims small entity status.
See 37 CFR 1.27.☐ Other than small entity - fee \$ _____ (37 CFR 1.17(m))**2. Proper reply****A. The proper reply (the missing 35 U.S.C. 371(c) requirement(s)) in the form of LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371 (identify type of reply):**☐ has been filed previously on _____.☒ is enclosed herewith.

[Page 1 of 2]

This collection of information is required by 37 CFR 1.137(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/64 (10-01)

Approved for use through 10/31/2002. OMB 0551-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

3. Terminal disclaimer with disclaimer fee

- ☒ Since this international application has an international filing date on or after June 8, 1995, no terminal disclaimer is required..
- ☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$_____ for a small entity or \$_____ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. STATEMENT: The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional.

Applicants were unaware that this application was not nationalized in the United States and once Applicants were made aware of the problem, present counsel was engaged to revive the application and complete the national phase filing under 35 U.S.C. 371.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

7 November 2005

Date

(713)977.7000

Telephone Number

Signature

Robert W. Strozier

Typed or printed name

Reg. No.: 34024

P.O. Box 429Bellaire, TX 77402-429

Address

- Enclosures ☒ Response:
☒ Fee Payment
☐ Terminal Disclaimer
☒ Transmittal Letter and Postcard

EV 434 862 221 US

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7 November 2005

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MS PCT

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7 November 2005

Date of Signature

Robert W. Strozier

[Page 2 of 2]



UNITED STATES PATENT AND TRADEMARK OFFICE

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U.S. APPLICATION NUMBER NO. 10/538,224	FIRST NAMED APPLICANT Ole-Bendt Rasmussen	ATTY. DOCKET NO. 50000-OR03
INTERNATIONAL APPLICATION NO. PCT/EP03/15001		
I.A. FILING DATE 09/12/2003	PRIORITY DATE 12/13/2002	

23873
ROBERT W STROZIER, P.L.L.C.
PO BOX 429
BELLAIRE, TX 77402-0429

CONFIRMATION NO. 9368

371
ABANDONMENT/TERMINATION
LETTER



OC000000017286647

Date Mailed: 10/20/2005

NOTIFICATION OF ABANDONMENT

The United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495) has made the following determination:

- Applicant has failed to provide the full U.S. Basic National Fee by 30 months (37 CFR 1.495(b)(2)).

Therefore, the above identified application failed to meet the requirements of 35 U.S.C. 371 and 37 CFR 1.495, and is ABANDONED AS TO THE UNITED STATES OF AMERICA.

WINSTON M ALVARADO

Telephone: (703) 308-9140 EXT 206

PART 1 - ATTORNEY/APPLICANT COPY

FORM PCT/DO/EO/909 (371 Abandonment Notice)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: RASMUSSEN
SERIAL NO: 10/538,224 - PCT/EP03/15001
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IMPROVED RESISTANCE TO BENDING IN
ALL DIRECTIONS AND METHODS AND
APPARATUS FOR THEIR MANUFACTURE

§ GROUP ART UNIT:
§ EXAMINER:
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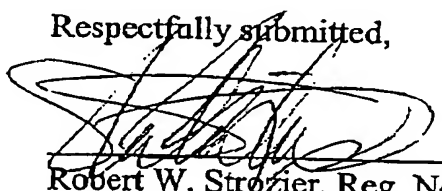
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Commissioner of Patent		
MS PCT		
Robert W. Strozier	P.O. Box 1450, Alexandria, VA 22313-1450	November 7, 2005 Date of Signature

STATEMENT ON UNINTENTIONAL ABANDONMENT

Applicant's attorney was using the old nationalization forms and failed to enclose the basic filing fee or authorize the Commissioner to charge his deposit account. This failure was wholly unintentional as Applicant's attorney rarely pays fees to the Patent Office until he has proof of receipt of the application. Applicant's attorney has had many problems with lost checks, lost documents and miss application of funds. Therefore, Applicant's attorney generally does not file with fees until he has some proof that the patent office has received the application. Applicant's attorney was not aware that the nationalization rules required payment of at least the basic fees as no other type of application requires the same.

Date: November 7, 2005

Respectfully submitted,


Robert W. Strozier, Reg. No. 34,024
Attorney for Applicants

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/538 224		INTERNATIONAL APPLICATION NO. PLT/EP03/15001		ATTORNEY'S DOCKET NUMBER 5000-OR d3	
20. Other items or information:					
The following fees have been submitted				CALCULATIONS PTO USE ONLY	
21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a))..... \$300				\$	300.00
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c))				\$	200.00
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0 All other situations..... \$200				\$	200.00
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority..... \$100 International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB..... \$400 All other situations..... \$500				\$	900.00
TOTAL OF 21, 22 and 23 =					
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100 =	/50 =		x \$250	\$	0
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$	130.00
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	42 - 20 =	22	x \$50	\$	1,100.00
Independent claims	4 - 3 =	1	x \$200	\$	200.00
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360	\$	0
TOTAL OF ABOVE CALCULATIONS =				\$	2330.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/3.					(7165.00)
SUBTOTAL =				\$	1165.00
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	0
TOTAL NATIONAL FEE =				\$	1165.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	0
TOTAL FEES ENCLOSED =				\$	1165.00
				Amount to be refunded:	\$
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PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021


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- a. ☒ A check in the amount of \$ 1915 to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees.
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 501518. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:


SIGNATURE
NAME RW STROZIER
REGISTRATION NUMBER 34 024



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FOR: LAMINATES OF FILMS HAVING IMPROVED
RESISTANCE TO BENDING IN ALL DIRECTIONS
AND METHODS AND APPARATUS FOR THEIR
MANUFACTURE

SERIAL NUMBER: 10/528224
DOCKET No.: 50000-OR03US

DATE MAILED: NOVEMBER 7, 2005

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☒ PRELIMINARY AMENDMENT
☒ CHECK FOR FEES AND REVIVAL FEE
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713-977-7000
P.O. BOX 429
BELLAIRE, TX 77402-0429

DATE 11/7/15 35-27130 TX 3385

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Rec'd PCT/PTO 07 NOV 2005
10/538224

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: RASMUSSEN § GROUP ART UNIT:
SERIAL NO: 10/538,224 - PCT/EP03/15001 § EXAMINER:
FILED: § DOCKET:
FOR: LAMINATES OF FILMS HAVING §
IMPROVED RESISTANCE TO BENDING IN §
ALL DIRECTIONS AND METHODS AND §
APPARATUS FOR THEIR MANUFACTURE §

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Commissioner of Patent MS PCT Robert W. Strozier		November 7, 2005 Date of Signature
P.O. Box 1450, Alexandria, VA 22313-1450		

SECOND PRELIMINARY AMENDMENT

Dear Sir/Madam:

Please amend the claims as follow.

AMENDMENTS**In the Claims****Canceled Claims**

Please cancel claims 1-99, without prejudice.

Amended Claims

- 1.(canceled)
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1 100.(previously presented) A laminate comprising a monofilm-formed or

2 multifilm-formed ply A, and another monofilm-formed or multifilm-formed ply B, both
3 mainly comprising orientable thermoplastic polymer material, in which A has a fluted
4 configuration and B on a first side is adhesive bonded in bonding zones to the crests on a first
5 side of A,

6 where:

7 (a) B also has a fluted configuration, the flute direction of B forming an angle from
8 generally about 30 up to and including 90 to the flute direction of A and the said bonding
9 zones being on the crests of the first side of B to produce spot bonding with the crests on the
10 first side of A,

11 (b) the adhesive bonding is

12 (i) directly A to B and established through a lamination layer on A and/or B;

13 (ii) established through a separate thin bonding film ; or

14 (iii) through a fibrous web adapted for bonding, and

15 (c) the wavelengths of the flutes in A and/or B are no longer than 5 mm, and the
16 wavelengths of the flutes in both A and B are less than 10 mm.

1 101.(previously presented) The laminate according to claim 100, wherein either the
2 thickness of each of the said plies is generally the same in bonded and unbonded zones, or
3 at least one of the plies exhibits first solid-state- attenuated zones extending parallel to the
4 flute direction, each bonding zone mainly being located within such a first attenuated zone
5 whereby each first attenuated zone is understood as delimited by the positions where the
6 thickness is an average between the minimum thickness of this ply within the first attenuated
7 zone and the ply's maximum thickness within the adjacent non-bonded zone.

1 102.(previously presented) The laminate according to claim 100, wherein the flute
2 wavelength in each of the two plies is no more than 4 mm, preferably no more than 3 mm and
3 still more preferably no more than 2 mm.

- 1 103.(previously presented) The laminate according to claim 100, wherein each of the
2 two plies the curved length of a flute is on average at least 5% and preferably at least 10%
3 longer than the linear wavelength, the curved length being understood as the length of a
4 curve through the cross section of a full flute wave including the bonding zone which curve
5 lies in the middle between the two surfaces of the ply.
- 1 104.(previously presented) The laminate according to claim 103, wherein at least one
2 of said plies the said average is at least 15%.
- 1 105.(previously presented) The laminate according to claim 103, wherein the width
2 of each bonding zone in at least one of the two plies is no less than 15%, preferably no less
3 than 20%, and still more preferably no less than 30% of the flute wavelength.
- 1 106.(previously presented) The laminate according to claim 100, wherein the flutes
2 in at least one of the two plies are evenly formed and extend in a generally rectilinear shape.
- 1 107.(previously presented) The laminate according to claim 100, wherein the flutes
2 in at least one of the two plies while extending mainly along one direction, are curved or
3 zig-zagging and/or branched.
- 1 108.(previously presented) The laminate according to claim 100, wherein the flutes
2 in at least one of the two plies while extending mainly along one direction are differently
3 shaped in a pattern which gives a visual effect showing a name, text, logo or similar.
- 1 109.(previously presented) The laminate according to claim 100, wherein at least one
2 of the two plies has a metallic or iridescent gloss, or the two plies have different colours.
- 1 110.(previously presented) The laminate according to claim 100, wherein the main

- 2 direction in which the flutes of A extend is generally substantially perpendicular to the main
3 direction in which the flutes of B extend.

1 111.(previously presented) The laminate according to claim 110, wherein one of the
2 said two directions essentially coincide with the machine direction of the lamination.

1 112.(previously presented) The laminate according to claim 100, wherein A, outside
2 its first attenuated zones if such zones are present, is molecularly oriented mainly in a
3 direction parallel to the direction of its flutes or in a direction close to the latter as determined
4 by shrinkage tests.

1 113.(previously presented) The laminate according to claim 112, wherein B also is
2 molecularly oriented and B's orientation outside its first attenuated zones if such zones are
3 present is higher than A's average orientation in the same direction outside its first attenuated
4 zones if such zones are present, the said two orientations being observable by shrinkage tests.

1 114.(previously presented) The laminate according to claim 112, wherein the yield
2 tension in A in a direction parallel with its flutes and/or the yield tension in B in a direction
3 parallel with its flutes, both referring to the cross- section of the respective ply and
4 determined in non-bonded narrow strips at an extension velocity of 500%min⁻¹, is no less
5 than 30 MPa, preferably no less than 50 MPa and still more preferably no less than 75 MPa.

1 115.(previously presented) The laminate according to claim 100, wherein B has a
2 lower coefficient of elasticity than A, both as measured in the direction perpendicular to the
3 flute direction of A.

1 116.(previously presented) The laminate according to claim 112, wherein the choice
2 of material for B and of depth of A's fluting is such that by stretching of the laminate

3 perpendicular to the direction of A's fluting up to the point where A's waving has
4 disappeared, B still has not undergone any significant plastic deformation, preferably B
5 comprises a thermoplastic elastomer.

1 117.(previously presented) The laminate according to claim 112, wherein B, outside
2 its first attenuated zones if such zones are present, has a main direction of molecular
3 orientation parallel to the direction of the flutes or in a direction close to the latter as provable
4 by shrinkage tests.

1 118.(previously presented) The laminate according to claim 112, wherein A is
2 composed of several films, and the said main direction of molecular orientation, is the
3 resultant of different monoaxial or biaxial orientations in the said films optionally mutually
4 differently directed.

1 119.(previously presented) The laminate according to claim 117, wherein B is
2 composed of several films, and the said main direction of orientation is the resultant of
3 different monoaxial or biaxial orientations in the said films optionally mutually differently
4 directed.

1 120.(previously presented) The laminate according to claim 100, wherein the first
2 attenuated zones are present in at least one of the two plies wherein if such zones of
3 attenuated ply extend in their transverse direction beyond the corresponding zones of bonding
4 into non- bonded zones of the ply, the extensions within each non-bonded zone are limited
5 to a total width which leaves more than half of and preferably no less than 70% of the width
6 of the non-bonded zone as not belonging to any first attenuated zone, these widths being the
7 distances measured along the curved surfaces.

1 121.(previously presented) The laminate according to claim 100, wherein the first

2 attenuated zones are present in at least one of the plies and in which the bonding zones are
3 generally coincident with the first attenuated zones.

1 122.(previously presented) The laminate according to claim 100, wherein the first
2 attenuated zones are present at least in one of the two plies. characterised by a second
3 solid-state-attenuated zone between each pair of adjacent first attenuated zones, said second
4 attenuated zones being narrower than said first attenuated zones and located on the
5 non-bonded crests of the respectively ply.

1 123.(previously presented) The laminate according to claim 100, wherein at least one
2 of the two plies exhibits solid-state-attenuated zones wherein the first attenuated zones of the
3 ply are attenuated so that the minimum thickness in such zone is less than 75% of the
4 maximum thickness of the ply in the non-bonded zone, preferably less than 50% and more
5 preferably less than 30% of that maximum thickness.

1 124.(previously presented) The laminate according to claim 100, wherein A and B
2 consist of material which is orientable at room temperature, preferably they mainly consist
3 of polyolefin.

1 125.(previously presented) The laminate according to claim 100, wherein the
2 spot-bonding between plies A and B is effected through a lower melting surface layer on at
3 least one of the plies, formed in a coextrusion process.

1 126.(previously presented) The laminate according to claim 100, wherein at least one
2 of the plies comprises a barrier film designed for protection against oxygen or other gaseous
3 materials.

1 127.(previously presented) The laminate according to claim 100, wherein at least

2 some of the flutes in one or both plies are flattened at intervals and preferably bonded across
3 each ones entire width at the flattened locations to make the two arrays of flutes form closed
4 pockets.

1 128.(previously presented) The laminate according to claim 127, wherein the flattened
2 portions of a number of mutually adjacent flutes or of all flutes are in array.

1 129.(previously presented) The laminate according to any of claim 100, wherein by
2 the choice of polymer material or by an incorporated filler or by orientation, the coefficient
3 of elasticity E in at least one of the plies, measured in the unbonded zone of the ply in the
4 direction parallel to the flute, as an average over the unbonded zone is no less than 700 MPa,
5 and preferably no less than 1000 MPa.

1 130.(previously presented) The laminate according to claim 100, wherein at least
2 some of the channels formed by the flutes in A and B, which channels may be closed to
3 pockets, contain a filling material in particulate, fibrous, filament or liquid form.

1 131.(previously presented) The laminate according to claim 130, wherein said
2 material is a preservative for goods intended to become packed in or protected by the
3 laminate, preferably an oxygen scavenger or ethylene scavenger, a biocide, such as a
4 fungicide or bactericide, a corrosion inhibitor or a fire extinguishing agent, optionally with
5 micro-perforations established in the flutes to enhance the effect of said preservative.

1 132.(previously presented) The laminate according to claim 100, wherein both A and
2 B are supplied with a multitude of perforations, whereby the perforations do not reach into
3 the bonded spots, and the perforations in A are displaced from the perforations in B so as to
4 cause gas or liquid when passing through the laminate, to run a distance through the flutes
5 generally parallel to the main surfaces of the laminate ; the channels formed by the flutes may

6 be closed to form pockets.

1 133.(previously presented) The laminate according to claim 132, wherein the channels
2 or pockets contain filling material adapted to act as a filter material by holding back
3 suspended particles from a fluid passing through the channels or pockets or is an absorbent
4 or ion-exchanger capable of absorbing or ion-exchanging matter dissolved in such fluid, said
5 filler optionally being fibre-formed or yarn-formed.

1 134.(previously presented) The laminate according to claim 133, wherein by choice
2 of hydrophobic properties of at least the inner surfaces of the channels or pockets formed by
3 the flutes and by selected small spacing of said channels or pockets, and choice of the
4 distances between the mutually displaced perforations in A and B, there is achieved a
5 desirable balance between the pressure needed to allow water through the laminate and the
6 laminate's capability to allow air and vapour to pass therethrough.

1 135.(previously presented) The laminate according to claim 132, wherein by a nap
2 of fibre-like film portions protruding from the borders of the perforations of at least on one
3 surface of the laminate.

1 136.(previously presented) The laminate according to claim 134, used as a sanitary
2 backsheet, preferably on a diaper or as a sheet for covering a patient during surgery.

1 137.(previously presented) The laminate according to claim 134, used for insulation
2 of buildings.

1 138.(previously presented) The laminate according to claim 132, used as a geotextile
2 which allows water to pass but holds fine particles back.

1 139.(previously presented) A bag made from the laminate according to any of the
2 claims 100 to 139, wherein the flutes on one of the two major surfaces of the bag are
3 generally perpendicular to the flutes on the other major surface of the bag.

1 140.(previously presented) A method of manufacturing a laminate of a first
2 monofilm-formed or multifilm-formed ply with a second monofilm-formed or
3 multifilm-formed ply both mainly consisting of orientable thermoplastic polymer material,
4 in which the first ply has a waved flute configuration, and the second ply on a first side is
5 adhesive bonded in bonding zones to the crests on a first side of A, in which further the
6 waved flute structure of the first ply is formed by the use of a grooved roller, and the said
7 bonding with the second ply is carried out under heat and pressure and also under use of a
8 grooved roller, wherein a) the second ply also is given a waved configuration, whereby under
9 use of at least one grooved roller the flute direction of the second ply is made at an angle to
10 the flute direction of the first ply and the said bonding zones are established on the crests of
11 the first side of the second ply to introduce spot bonding with the crests on the first side of
12 the first ply, b) the adhesive bonding i) is directly first to second ply and established through
13 a lamination layer on at least one of these plies ; ii) established through a separate thin
14 bonding film ; or iii) established through a fibrous web adapted to the bonding; and c) the
15 wavelengths of the flutes in both plies are no longer than 10 mm, and the wavelengths of the
16 flutes in at least one of the plies are no longer than 5 mm.

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- 1 173.(previously presented) A laminating apparatus comprising a grooved roller for
2 fluting a first ply of thermoplastic polymer material, a grooved roller for fluting a second ply

3 of thermoplastic polymer material, means for directing the first and second plies from their
4 respective grooved rollers to a laminating station with the plies arranged in face to face
5 contact with one another and with the flutes of the first ply generally directed at an angle to
6 the flutes of the second ply, the laminating station comprising grooved laminating rollers
7 which apply heat and pressure between the plies to bond the plies together at the crests of the
8 flutes of the second ply to form a laminate, the grooved fluting rollers and the grooved
9 laminating rollers having groove pitches such that in the laminate the plies each have flutes
10 of wavelength less than 10 mm and the flutes of at least one of the plies have a wavelength
11 no longer than 5 mm.

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Respectfully submitted,

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